

**ABSTRACT**

Described herein is a novel intracellular estradiol binding protein ("IEBP"), as well as a polynucleotide encoding this protein and various cells and cell lines producing and/or overexpressing it. IEBP is believed to play a role in the modulation of estrogen signaling and in the physiological resistance to the same. Abnormally elevated or decreased levels of IEBP may thus be a component of the etiology of diseases generally correlated with estrogen signaling, such as, by way of example, breast cancer and osteoporosis. Various embodiments of the present invention are believed to provide important tools for developing treatments for these conditions, such as, for example, by providing means for screening therapeutic compounds and identifying a genetic target for therapy.